

Regional HIV/AIDS Epidemiologic Profile of Massachusetts: 2015

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2014: Massachusetts

	N	%
People Living with HIV/AIDS	19,737	60%
<i>People Living with HIV/AIDS and First Diagnosed in Another U.S. State</i>	3,380	-- ²
People Reported with HIV or AIDS Who Are Deceased	13,428	40%
Total Number of People Reported with HIV Infection or AIDS²	33,165	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts; therefore people living with HIV/AIDS and first diagnosed in another U.S. state are not included in the total number of people reported with HIV Infection or AIDS.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 2. Average annual rate of HIV infection diagnosis from 2011 to 2013 and HIV/AIDS prevalence rate on 12/31/14¹: Massachusetts²

Average annual HIV diagnosis rate from 2011–2013	Average rate per 100,000	Average annual number of HIV diagnoses
Massachusetts Total	10.7	701.3
HIV/AIDS prevalence rate on 12/31/14	Rate per 100,000	Number of people living with HIV/AIDS
Massachusetts Total	301.5	19,737

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2004–2013, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2004	14,986	354	922
2005	15,556	332	902
2006	16,057	324	825
2007	16,518	286	747
2008	16,977	283	742
2009	17,395	288	706
2010	17,829	264	698
2011	18,296	230	697
2012	18,769	236	709
2013	19,279	188	698

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 4. People diagnosed with HIV infection from 2011–2013¹ and people living with HIV/AIDS on December 31, 2014 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	1,553	74%	14,098	71%
Female	551	26%	5,639	29%
Place of Birth:	N	%	N	%
US	1,241	59%	12,808	65%
Puerto Rico/US Dependency ³	149	7%	1,992	10%
Non-US	714	34%	4,937	25%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	777	37%	8,468	43%
Black (non-Hispanic)	660	31%	5,894	30%
Hispanic/Latino	573	27%	4,867	25%
Asian/Pacific Islander	66	3%	358	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	917	44%	7,450	38%
Injection Drug Use (IDU)	154	7%	3,633	18%
MSM/IDU	56	3%	677	3%
Heterosexual Sex	200	10%	2,768	14%
Other	10	0%	406	2%
Total Undetermined	767	36%	4,803	24%
• Presumed Heterosexual Sex ⁴	275	13%	1,813	9%
• Undetermined ⁵	492	23%	2,990	15%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2014	
Under 13	7	<1%	23	<1%
13 to 19	63	3%	77	<1%
20 to 24	221	11%	293	1%
25 to 29	270	13%	640	3%
30 to 34	281	13%	937	5%
35 to 39	229	11%	1,308	7%
40 to 44	280	13%	1,887	10%
45 to 49	308	15%	3,251	16%
50 to 54	201	10%	4,133	21%
55 to 59	129	6%	3,413	17%
60+	115	5%	3,775	19%
Total⁶	2,104	100%	19,737	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Massachusetts¹

Race/Ethnicity:	Men		Women	
	N	%	N	%
White, non-Hispanic	7,086	50%	1,383	25%
Black, non-Hispanic	3,309	23%	2,585	46%
Hispanic/Latino	3,325	24%	1,542	27%
Asian/Pacific Islander	278	2%	79	1%
Other/Unknown	100	1%	50	1%
Total	14,098	100%	5,639	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 6. People living with HIV/AIDS on December 31, 2014 by gender and reported risk: Massachusetts¹

Reported risk:	Men		Women	
	N	%	N	%
Male-to-male sex (MSM)	7,450	53%	N/A	N/A
Injection drug use (IDU)	2,392	17%	1,241	22%
MSM/IDU	677	5%	N/A	N/A
Heterosexual sex	823	6%	1,945	34%
Other	224	2%	182	3%
Total undetermined/other	2,532	18%	2,271	40%
• Presumed heterosexual sex ²	N/A	N/A	1,813	32%
• Undetermined ³	2,532	18%	458	8%
Total	14,098	100%	5,639	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes woman sex with men of unknown HIV status or risk. This category is limited to women.

³ Includes man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts¹ 2004–2013²

	Men		Women		Total
	N	%	N	%	
2004	646	70%	276	30%	922
2005	658	73%	244	27%	902
2006	592	72%	233	28%	825
2007	535	72%	212	28%	747
2008	541	73%	201	27%	742
2009	542	77%	164	23%	706
2010	501	72%	197	28%	698
2011	499	72%	198	28%	697
2012	521	73%	188	27%	709
2013	533	76%	165	24%	698

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2004–2013²

	White (NH)		Black (NH)		Hispanic/ Latino		API		Total ³
	N	%	N	%	N	%	N	%	N
2004	346	38%	310	34%	243	26%	15	2%	922
2005	360	40%	302	33%	221	25%	16	2%	902
2006	344	42%	253	31%	202	24%	19	2%	825
2007	315	42%	237	32%	175	23%	17	2%	747
2008	292	39%	250	34%	166	22%	27	4%	742
2009	286	41%	229	32%	170	24%	18	3%	706
2010	280	40%	217	31%	174	25%	23	3%	698
2011	240	34%	245	35%	174	25%	25	4%	697
2012	270	38%	214	30%	195	28%	22	3%	709
2013	268	38%	201	29%	204	29%	18	3%	698

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

NH = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2004–2013²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2004	552	60%	100	11%	270	29%	922
2005	544	60%	83	9%	275	30%	902
2006	509	62%	60	7%	256	31%	825
2007	461	62%	57	8%	229	31%	747
2008	447	60%	68	9%	227	31%	742
2009	444	63%	52	7%	210	30%	706
2010	437	63%	43	6%	218	31%	698
2011	419	60%	42	6%	236	34%	697
2012	394	56%	65	9%	250	35%	709
2013	428	61%	42	6%	228	33%	698

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas, <1% were born in the US Virgin Islands, and <1% were born in Guam.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 10. People diagnosed with HIV infection by reported risk and year of diagnosis: Massachusetts¹, 2004–2013²

	MSM		IDU		MSM/ IDU		HTSX		Pres. HTSX ³		Undeter- mined ⁴		Total ⁵
	N	%	N	%	N	%	N	%	N	%	N	%	N
2004	292	32%	147	16%	26	3%	139	15%	112	12%	195	21%	922
2005	349	39%	123	14%	23	3%	112	12%	100	11%	190	21%	902
2006	344	42%	98	12%	18	2%	102	12%	105	13%	152	18%	825
2007	295	39%	96	13%	22	3%	82	11%	84	11%	163	22%	747
2008	291	39%	71	10%	29	4%	95	13%	83	11%	166	22%	742
2009	317	45%	49	7%	18	3%	90	13%	64	9%	164	23%	706
2010	296	42%	68	10%	23	3%	84	12%	86	12%	135	19%	698
2011	276	40%	64	9%	19	3%	87	12%	82	12%	166	24%	697
2012	320	45%	48	7%	22	3%	68	10%	97	14%	150	21%	709
2013	321	46%	42	6%	15	2%	45	6%	96	14%	176	25%	698

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes woman sex with men of unknown HIV status or risk. This category is limited to women.

⁴ Includes man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Totals include pediatric and blood/blood products reported risks

MSM = Male-to-Male Sex; IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Massachusetts¹, 2004–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	324	968	33%
2005	335	922	36%
2006	323	902	36%
2007	290	825	35%
2008	263	747	35%
2009	224	742	30%
2010	207	706	29%
2011	224	698	32%
2012	236	697	34%
2013	222	709	31%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Massachusetts,¹ 2011–2013²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	458	1,553	29%
Female	183	551	33%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	201	777	26%
Black (non-Hispanic)	243	660	37%
Hispanic/Latino	168	573	29%
Asian/Pacific Islander	20	66	30%
Other/Undetermined ³	9	28	32%
Place of Birth:	N	N	%
US	309	1,241	25%
Puerto Rico/US Dependencies ⁴	47	149	32%
Non-US	285	714	40%
Total	641	2,104	30%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15